

- Application No. 10/786,985
- Amendment Dated 29 September 2006
- Reply to Office Action of 29 June 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A drive system for a vehicle, ~~especially a commercial vehicle such as an agricultural or industrial tractor~~, the vehicle having at least one first wheel that is driven by ~~a first~~ ~~an associated axle or single-wheel~~ drive motor and at least one second wheel driven by a second drive motor, in a drive train of which a ~~gearbox~~ shiftable transmission that can be shifted between at least two speed transmission steps is arranged between the second drive motor and the second wheel, comprising:

a device for the detection of a shift command; and,

a control unit, which in the presence of a shift command automatically applies a greater load ~~at least~~ on the drive motor driving the first wheel, controls the shifting operation of the ~~change-speed gearbox~~ shiftable transmission of the second wheel and then lowers the load of the drive motor driving the first wheel.

2. (Cancelled)

3. (Currently Amended) A drive system according to claim 1 wherein at least two vehicle axles with at least two wheels, respectively, are provided, and wherein the wheels of at least one first axle are driven by a ~~joint axle~~ drive motor ~~or by single-wheel drive motors that are assigned to each wheel~~ and the wheels of at least one second axle are driven through at least one shiftable transmission by one of a vehicle drive train, ~~by~~ an axle drive motor or ~~by~~ single-wheel drive motors.

4. (Original) A drive system according to claim 1, wherein at least one first wheel through a first shiftable transmission is driven by a first single-wheel drive motor and at least one second wheel through a second shiftable transmission is driven by a second single-wheel drive motor, and that the control device in the presence of a shift command initially performs a shift of the first transmission while raising the load of the second single-wheel drive motor and subsequently performs a

shift of the second transmission while raising the load of the first single-wheel drive motor.

5. (Original) A drive system according to claim 1, wherein a clutch is arranged in a drive train comprising a change-speed gearbox.

6. (Currently Amended) A drive system according to claim 2 1, wherein ~~at least one~~ an electric machine ~~or a hydraulic motor~~ is provided as the ~~axle or single-wheel~~ drive motor.

7. (Currently Amended) A drive system according to claim 6, wherein at least one electric energy storage unit that can be mounted on the vehicle serves as ~~the~~ an energy source for the electric machine.

8. (Currently Amended) A drive system according to claim 6, wherein a generator that is driven by an internal combustion engine serves as ~~the~~ an energy source for the electric machine.

9. (Original) A drive system according to claim 8, wherein the electric machine is designed such that the electric machine can be operated both as an electric motor driving the associated wheel and as a generator braking the wheel.

10. (Original) A drive system according to claim 9, wherein at least one converter and an intermediate circuit are arranged downstream from the generator in such a way that the generator can be driven electrically by the power released by the electric machine operating as a generator in the electric braking operation and thus operate as an electric motor.

11. (Currently Amended) A drive system according to claim 2 1, wherein the shiftable transmission comprises one of a planetary gearbox or a standard transmission.

12. (Currently Amended) A drive system according to claim 2 1, wherein at least one speed-reducing final drive transmission, ~~especially a planetary gearbox~~, is arranged downstream from one of the axle or the single-wheel drive motors.
13. (Currently Amended) A drive system according to claim 2 1, wherein the ~~single-wheel~~ drive motor is ~~essentially~~ arranged within a wheel rim.
14. (Currently Amended) A drive system according to claim 2 1, wherein the shiftable transmission is ~~essentially~~ arranged within a wheel rim.
15. (Currently Amended) A drive system according to claim 12, wherein the final drive transmission is ~~essentially~~ arranged within a wheel rim.